



QCA6234 Modular Certification

OEM Integrator Instructions

80-xxxxx Rev. 1.4

July 12, 2013

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Revision history

Revision	Date	Description
Ver. 1.0	April 2013	Initial release
Ver 1.1	June 2013	
Ver 1.2	June 5, 2013	Updated FCC Labeling
Ver 1.3	June 20, 2013	Updated System Level countries not done by QCA
Ver 1.4	July 21, 2013	Typo/corrections per TCB review

CAUTION: Qualcomm Atheros offers modular certifications (radio type approvals granted by global regulators) for the SiP product referenced in this document. The modular certifications may only be used by Qualcomm Atheros Partners/OEM Integrators who have signed the separately provided “Host Integrator Agreement”.

Use of the modular certifications is subject to specific design and implementation restrictions and conditions as described in this document and the separately provided “SiP Module Certified Antennas and Layout” document.

Any deviation from the provided instructions and agreements, including failure to take necessary action by the *OEM Integrator* could result in a violation of applicable national law and in such event, the modular certifications, and the host products into which the radio module is incorporated, may not be lawfully distributed or sold. Qualcomm Atheros assumes no responsibility for any liability or loss related to installation, integration, or operation of the Module.

Per the Host Integrator agreement, Qualcomm Atheros reserves the right to review records and audit the Integrator’s adherence to the procedures and required actions stated in this document.

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1 Introduction

This document describes the steps that the OEM integrator must follow when designing and manufacturing a system utilizing a certified SiP (System-in-Package) radio module (the “Module”).

Failure to follow the instructions in this document may invalidate the radio certifications and authorization to market the host product.

The Qualcomm® Atheros modular certifications described in this document apply only to radio conformance for the Module. The OEM integrator is responsible for all system-level EMI/EMC, Product Safety and RF Safety testing and certification that apply to the host system in countries where the system will be marketed or sold.

This document must be read in conjunction with the document “QCA6234 SiP Module Certified Antennas and Layout” which describes the allowable antenna options, PCB layout, and schematic which must be implemented in the host design in order to use the SiP modular certifications.

To obtain the above referenced document and other design documents, please contact your Qualcomm Atheros account representative.

Throughout this document, the term *Certified Module* and *Certified SiP* have the same meaning. Qualcomm Atheros offers modular certification for the SiP component. In this case, the SiP is considered “the Module”.

2 Applicable Module

This document applies specifically and solely to the following component:

- Part Number: QCA6234
- FCCID: PPD-QCA6234 IC ID: 4104A- QCA6234

3 Available Global Modular Approvals

Module certification is limited to those countries for which Qualcomm Atheros has obtained radio modular approvals. Integrators can access the current list of certified countries in one of two ways:

1. Log on to the Qualcomm Atheros secure customer support site. Follow the links to regulatory certifications.

Search for the folder **QCA6234** on the support site.

Or, if you do not have access to the customer support site, then:

2. Contact your Qualcomm Atheros account representative to request access to the country list and modular certificates.

OEM integrators must obtain their own radio certification for any country in which the system will be sold if a modular certification for that country is not available from Qualcomm Atheros.

4 Deviation from Specifications for Host Layout, BOM, and Schematics

The FCC requires that host systems using SiP modular approvals *copy exactly* the antenna trace design, matching component and layout used for the originally certified Qualcomm Atheros design. The certified design is specified in the document “QCA6234 SiP Module Certified Antennas and Layout”.

An OEM integrator may wish to deviate from that specification and still utilize the available SiP modular approvals offered by Qualcomm Atheros. For example a host design may require modified antenna trace length and layout, alternate PCB antenna design or use of other filter types not specified in “QCA6234 SiP Module Certified Antennas and Layout” document. Some deviations would not be allowed and would instead require a full/new certification for FCC and other countries. For example addition of any **active** components in the RF path on the host PCB would require full/new radio certifications for the host device.

Generally, alternate PCB layout, stackup, alternate matching component values and **passive** filters or diplexers *may* be authorized using the FCC permissive change process. However, the required steps and responsibilities of the host integrator for the permissive change process, is not detailed in this document. An evaluation must be done on a case-by-case basis and agreed with Qualcomm Atheros. Please take the steps below:

Request for Review of Deviation from Qualcomm Atheros Design Specification:

1. Email host product details, description of deviations, proposed schematic of RF section on host PCB (if available) to: moduleinstructions@qualcomm.com

Sample Text for Subject Line of email: Request for review of deviation from SiP PCB design, Company ABCD, Host Model 12345

2. The Qualcomm Atheros Regulatory team will respond within 14 days requesting further details, informing whether the requested deviation will be allowed with a proposed plan for the OEM Integrator to follow if agreed.

NOTE: If a permissive change test and submission to FCC is proposed by Qualcomm Atheros, the OEM Integrator will be responsible for managing the project and resulting test and filing costs.

5 Validation of SiP Radio Conformance as Implemented in Host

When a host systems copies exactly the antenna trace design, matching component and layout specified in “QCA6234 SiP Module Certified Antennas and Layout”, there is still a need to validate that the final product design maintains compliance with radio conformance rules. Minor electrical variations in PCB trace design, stackup and possible coupling with nearby circuits in the end system may result in different emissions characteristics compared to the original SiP design used for standalone modular certification testing performed by Qualcomm Atheros.

Therefore radiated spurious emissions testing must be performed on each unique host device that uses a certified SiP.

The host integrator must follow these steps:

- Request a quote from any competent third party test lab for **Radiated Spurious emissions testing** including restricted bands per FCC 15.247(d) for 2.4 GHz and 15.407(b) for 5 GHz.

This type of testing may be referred to as “permissive change” testing. However, it is not normally required to submit the report to the regulator. A Class 2 Permissive Change filing is Not required and should not be quoted by the test lab. Testing and a report is sufficient.

- Testing may be performed conveniently at the same test lab and at the same time as the FCC Part 15B, digital emissions testing which is mandatory for every host design. However, the spurious emission testing normally requires radio test software on the host device.
- It is acceptable and desirable to perform the 15.247 / 15.407 radiated spurious testing early in the design process - as soon as a final PCB design and functional system is available. This validation testing need not be done using the final production version, as long as PCB and RF design is not modified.
- The third party lab report showing 15.247 / 15.407 compliance *must be submitted to Qualcomm Atheros* using the email address: moduleinstructions@qualcomm.com.

Please contact your Qualcomm Atheros Account Representative or email any questions to above email address for assistance preparing for the Radiated Spurious emissions testing. Qualcomm Atheros can provide further instructions if the OEM Integrator is not familiar with the Qualcomm Atheros test software used to support radio testing.

6 Additional Regulatory Conformance Testing and/or Submissions Required by the Integrator

- The modular certifications provided by Qualcomm Atheros apply to radio conformance for the Module only. The OEM integrator is responsible for additional system-level EMI/EMC, Product Safety and RF Exposure testing and certification that applies in the U.S. and other countries. This includes, but is not limited to, Federal Communications Commission (“FCC”) Part 15 Class B Digital Emissions, China CCC, Taiwan BSMI, Korea KC, ETSI EN 301 489-17 and others.

System-level EMC tests are to be done with the Module installed and included in the scope of the submission.

- Some of the countries for which modular certifications are provided require additional submissions, authorizations or import permission by the system-vendor or importer. Qualcomm Atheros is not responsible for these additional actions.

A few examples: The OEM integrator must take additional action for radio certification in these countries:

Malaysia	Each importer/distributor needs to file for import permission
Singapore	Recommend use of importer’s own local radio dealer number
Israel	Additional approval certificate required for importer
Indonesia	Modular approval not accepted. Requires system level radio certification done by OEM Integrator.
China	Modular approval not accepted. Requires system level radio certification done by OEM Integrator.
Brazil	Modular approval not accepted. Requires system level radio certification done by OEM Integrator. Also SAR test on host required in Brazil test lab.

- Modular radio certification is not possible in some countries. For such countries, OEM integrators must ensure radio certification for the end system is obtained, before placing the product on the market. A current list of applicable countries can be provided by Qualcomm Atheros.

Please contact your Qualcomm Atheros account representative with any questions on the scope of Qualcomm Atheros radio modular approvals and the system integrator’s responsibilities for system-level regulatory conformance. Or email questions to: moduleinstructions@qualcomm.com.

7 Compliant/Allowable Tx Power Settings Programmed into EEPROM

This file contains the allowable transmit power settings that are to be programmed into the Module during original manufacturing:

CTL File Name: TO BE PROVIDED BY Qualcomm Atheros
--

NOTE: Programming in higher values than provided for in this file will invalidate all radio certifications for this module.

OEM integrators can access the file one of two ways:

- Log on to the Qualcomm Atheros secure customer support site, then:
 - a. Download the Atheros Radio Test (ART) package
 - b. Browse to this folder in the zip package: **command\QCA6234**
 - c. Find the **CTL File** (file name reference above)

OR, if you do not have access to the customer support site, then contact your Qualcomm Atheros account representative to request the CTL file.

8 Allowable Antennas to Use with the SiP Module

The module is certified for use only with certain antennas as described in the separate document “QCA6234 SiP Module Certified Antennas and Layout”. Specifically, PCB Trace antenna and Connectorized PIFA antenna options are available.

Connectorized PIFA Antenna Option

The document “QCA6234 SiP Module Certified Antennas and Layout” specifies a connectorized antenna design. See the section in that document titled: **Antenna via U.FL connector**. Using this design, an externally connected PIFA antenna with any desired cable length may be chosen by the OEM integrator with the following limitation: The antenna specification sheet must indicate peak gains (including cable losses) do not exceed the values below.

Table 8-1 Connectorized PIFA Antenna: Allowed Maximum Gain (dBi), Including Antenna Cable Loss

2.4 GHz	2
5.150-5.350 GHz	2
5.470-5.850 GHz	2

NOTE: Antenna Type: PIFA with omnidirectional pattern formed from stamped metal or film.

PCB Trace Antenna Option

The document “QCA6234 SiP Module Certified Antennas and Layout” specifies a Trace Antenna design and reference a required Gerber file. See the section in that document titled: **Trace (PCB) Antenna**. Using this design, the exact PCB trace antenna layout must be implemented on the host device.

WARNING: Use of other connectorized antenna types not specified above or use of PIFA antennas with higher gain than above, or use of a Trace Antenna design different than specified in the document is *not allowed* without additional conformance testing and agreement from Qualcomm Atheros. If an alternate antenna is desired by the integrator, please contact Qualcomm Atheros with details on the product and requested deviation from the allowed antenna specifications referenced above. You may contact your Qualcomm Atheros account representative or email: moduleinstructions@qualcomm.com.

Notification of All Antenna Models to be used with the Module:

In addition, regulatory agencies in Japan, Korea, and Taiwan require submission of antenna specification sheets for all antenna models used with a Qualcomm Atheros module (or SiP). This notification process must be followed by the integrator before original product launch and whenever new host systems (with new antenna models) are launched.

This notification applies when launching new host systems using the certified SiP with alternate models of a connectorized PIFA antenna. This notification does not apply for PCB Trace antennas since only the one trace antenna design specified by Qualcomm Atheros is allowed.

For training on the notification process contact:

Stanley Lin, Regulatory Program Manager [slin@qualcomm.com]

For submitting antenna specifications for Japan/Korea/Korea, email: atheros-ant@dspr.co.jp

9 RF Safety of Each Host System Design

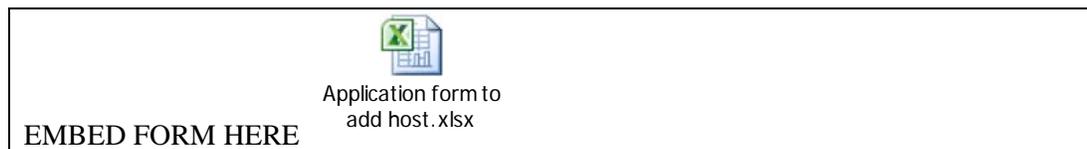
The FCC and other countries' regulatory bodies impose strict conditions and limitations on the RF exposure levels of end products. Compliance with RF Safety requirements depend on the Module transmit power, location of the transmitting antenna(s) inside the host system, separation of the transmitting antennas to the end user and intended use/category of the host. Additionally, host devices that collocate the Qualcomm Atheros module with other radio transmitters may be subject to additional evaluation (i.e., Collocated SAR Evaluation). OEM integrators must take great care to ensure each host system complies with the applicable RF exposure requirements. The OEM integrator is responsible to ensure RF Safety compliance of each host product design.

Determining the applicable RF Exposure evaluation for the host device depends on many factors related to the host device, the Qualcomm Atheros module and prior RF Exposure evaluation performed by Qualcomm Atheros for the same module as well as evolving guidance from FCC regarding application of the various KDBs for RF Safety. Therefore Qualcomm Atheros offers a service to OEM Integrators for detailed review of the host device and a resulting test plan and quotation, if required. This Host Review will be performed by a third party test lab, UL Verification Service. The procedure is detailed here:

Mandatory Host Review for RF Safety and Collocation with other Radios

NOTE: OEM Integrators must follow the Host Review procedure below for each unique host product design using the Qualcomm Atheros certified module. The Host review will also determine applicable testing and or reporting requirements due to collocation of other radios with the Qualcomm Atheros certified module.

1. Before initial launch of each unique host design, as early as possible in the design cycle, complete the attached form as completely as possible.



2. Email the form to this address: NewPlatformRFEAssessment@ul.com
Attachment limit is 15MB. Please use WinRAR to split into multiple emails if needed.

It is recommended to complete separate forms for each unique host design, where mechanical design, features or co-located radio features differ. Or a family of hosts may be combined in one form, where the difference can be stated clearly by the integrator (e.g. one mechanical design for the host and antennas, but using a series of alternate collocated WAN modules)

3. UL VS will respond within 14 days requesting any missing or additional required information from the integrator, or with a final RF Safety Plan for the host device. This plan will state one of the following cases:
 - a. No RF Safety evaluation/testing required for the host
 - b. No RF Safety evaluation, but permissive change filing to FCC and Industry Canada required to report colocation of the Qualcomm Atheros certified module with other radios present in the host
 - c. RF Safety evaluation required and a quotation for the required SAR testing and TCB submission is provided by UL VS. The host integrator is free to accept/use UL VS test lab located in Fremont, CA for the quoted SAR testing or choose any other competent lab for the required testing. The pricing offered by UL VS for SAR evaluation has been negotiated with Qualcomm Atheros and is competitive.
 - d. However, in all cases, where FCC and Industry Canada Class 2 permissive change submission is required due to RF Safety evaluation or colocation rules, *Qualcomm Atheros requires the use of UL VS as the TCB.*

NOTE: OEM Integrators are free to choose/use any test lab if host RF Exposure evaluation/SAR testing is required. However, **OEM Integrators must use UL VS as the TCB for any necessary FCC/IC Permissive Change filings.** No other TCB will be allowed when using Qualcomm Atheros certified modules.

10 Required Labeling on the Outside of the Host Device

NOTE: Explanatory text in red font must not be included in the final label.

10.1 FCC

- The FCC requires a label on the outside of the host system visible to the end user.
Example wording is:

Contains: FCC ID: XXX-XXXXXXX IC: XXXXX-XXXXXX
--

(Replace X's with actual IDs found in section 2).

- The FCC requires a logo signifying emissions compliance on the outside of the host system.

Additional options are available for placement of the FCC label on the host. Please refer to the FCC Knowledge Database KDB784748 found at <https://apps.fcc.gov/oetcf/kdb/index.cfm>.

NOTE: The Integrator is responsible to perform FCC Part 15 Class B digital emissions testing on the end system with the radio Module installed. The FCC logo below should not be affixed unless the OEM integrator has obtained the necessary Part 15 approval, e.g., self-declaration of conformity.

If the host system is approved to FCC Class B digital emissions limits under a grant of certification issued by a TCB, the FCC ID number shown on the grant should be used on the label instead of the FCC logo below.



10.2 Taiwan NCC

Taiwan NCC requires a label on the outside of the host system visible to the end user.
The required wording is:

本產品內含射頻模組:  XXXXXXXXXXXX

(Replace X's with actual IDs found in section 1).

10.3 European Community R&TTE

- The European Community R&TTE Directive requires the CE Marking shown below on the outside of the host AND on the outside of the shipping container/packaging:



- The European Community R&TTE Directive also requires the following note to consumers on the outside of the shipping container/packaging:

Important Notice: This product is a Radio LAN device operating in 2.4 & 5 GHz bands for Home and Office use in the E.E.A. States with restrictive use are highlighted in grey. Refer to user documentation for details.			
AT	BE	CH	CY
CZ	DE	DK	ES
FI	FR	GB	GR
EE	HU	IT	IE
IS	LI	LT	LU
LV	MT	NL	NO
PL	PT	SE	SI
SK			

NOTE: The integrator is expected to translate the text in this section into the appropriate local languages for the European countries in which the product will be marketed.

11 Required Labeling on the Module

11.1 FCC labeling on the Module/SiP

Due to extreme size constraint, the FCC has granted an exemption for this SiP module. Specifically, the FCCID is not to be affixed to the SiP (and not affixed inside the host product). However, the other sections of this document are still required (ie affix the FCC ID in the product user manual and on the outside of host product).

NOTE: Please email questions regarding labeling rules to: moduleinstructions@qualcomm.com.

11.2 Rest of world labeling on the Module

Other regions rules allow radio certification labeling to appear in the user manual and on the outside of the host product. The Integrator must ensure the host product and user manual includes all required regulatory labeling (including radio certification numbers and logos for all target countries). The system integrator is responsible to confirm the final regulatory label contains all required certification IDs for all countries in which the system will be marketed or sold.

Qualcomm Atheros provides sample artwork with the applicable certification numbers available for the Module. The provided .PDF document can be opened using Adobe Illustrator so the sample artwork can be copied and modified as needed. Therefore the final label produced by the Module manufacturer will vary from this sample. However, the logos and certification numbers must be those shown in the sample global label.

NOTE: These instructions refer to regulatory labeling to be affixed to the outside of the host product – not on the SiP itself. The FCC requires the FCCID on the outside of the host product.

11.3 Instructions to download the sample global label artwork with certification IDs

1. Log on to the Qualcomm Atheros secure customer support site. Follow the links to regulatory certifications.

NOTE: Search for the folder **QCA6234** in the support site.

2. Find the folder: Sample Labeling for Host System and User Manual for SiP.
3. Download the PDF file found in the folder.

OR, if you don't have access to the customer support site, then contact your Qualcomm Atheros account representative to request the Sample Label file.

12 Required Regulatory Wording for User Guide/Installation Manual

The integrator must include the text below or equivalent in the user documentation.

NOTE: Text in red font must be replaced.

12.1 FCC compliance information

This device contains a certified radio module:

FCCID: **XXX-XXXXXXX**

IC ID: **XXXXX-XXXXXXX**

(Replace X's with actual IDs found in section 1).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product does not contain any user serviceable components. Any unauthorized product changes or modifications will invalidate warranty and all applicable regulatory certifications and approvals, including authority to operate this device.

FCC Part 15 Digital Emissions Compliance

We **[System Integrator Company Name, Address, Telephone]**, declare under our sole responsibility that the product **[System Name]** complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet prepared by the Federal Communications Commission helpful:

The Interference Handbook

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No.004-000-00345-4.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

(RF exposure statement)

Radiation Exposure Statement:

The product complies with the FCC RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. Further RF exposure reduction can be achieved if the product is kept as far as possible from the user body.

12.2 Industry Canada notice

This device complies with Canadian RSS-210.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution:

(i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

(iii) The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

(iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;

(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(RF exposure statement)

Radiation Exposure Statement:

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. Further RF exposure reduction can be achieved if the product is kept as far as possible from the user body.

12.3 European Community (R&TTE) user manual wording and declaration

NOTE: Text in **red font** must be replaced with name of company responsible for placing the system on the European Community Market.

Europe – EU Declaration of Conformity



Marking by the above symbol **indicates** compliance with the Essential Requirements of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards:

EN300 328, EN 301 893, EN 301 489-17, EN60950, EN 62311

Česky [Czech]	[COMPANY NAME] tímto prohlašuje, že tento Radiolan je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede [COMPANY NAME] erklærer herved, at følgende udstyr Radiolan overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erkläre [COMPANY NAME] dass sich das Gerät Radiolan in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab [COMPANY NAME] seadme Radiolan vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, [COMPANY NAME], declares that this Radiolan is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [COMPANY NAME] declara que el Radiolan cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [COMPANY NAME] ΔΗΛΩΝΕΙ ΟΤΙ Radiolan ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente [COMPANY NAME] déclare que l'appareil Radiolan est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Íslenska [Icelandic]	Hér með lýsir [COMPANY NAME] yfir því að Radiolan er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Italiano [Italian]	Con la presente [COMPANY NAME] dichiara che questo Radiolan è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [COMPANY NAME] deklarē, ka Radiolan atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [COMPANY NAME] deklaruoja, kad šis Radiolan atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Malti [Maltese]	Hawnhekk, [COMPANY NAME], jiddikjara li dan Radiolan jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, [COMPANY NAME] nyilatkozom, hogy a Radiolan megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Nederlands [Dutch]	Hierbij verklaart [COMPANY NAME] dat het toestel Radiolan in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

 Norsk [Norwegian]	[COMPANY NAME] erklærer herved at utstyret <i>Radiolan</i> er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
 Polski [Polish]	Niniejszym [COMPANY NAME] oświadcza, że Radiolan jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
 Português [Portuguese]	[COMPANY NAME] declara que este Radiolan está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
 Slovensko [Slovenian]	[COMPANY NAME] izjavlja, da je ta Radiolan v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
 Slovensky [Slovak]	[COMPANY NAME] týmto vyhlasuje, že Radiolan spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
 Suomi [Finnish]	[COMPANY NAME] vakuuttaa täten että Radiolan tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
 Svenska [Swedish]	Härmed intygar [COMPANY NAME] att denna Radiolan står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Restrictions for use of 2.4 GHz frequencies in European Community countries; the restriction described follows ERC/REC 70-03 (Edition of September 2011). It is recommended to check latest edition for updated restrictions.

France:	The outdoor use is limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz.
Italia:	For private use, a general authorisation is required if WAS/RLAN's are used outside own premises. For public use, a general authorisation is required.

12.4 European Community (R&TTE) Declaration of Conformity for System

In addition to including the radio conformity wording described in the previous section in the user manual, the end integrator must create and sign a European Declaration of Conformity (DoC) for all European Directives applicable to the end product. At a minimum, this will be a DoC per the R&TTE Directive covering Radio, EMC, product Safety and RF Exposure essential requirements and Hazardous material/REACH directive. The DoC must reference harmonized standards used for all radios present in the system.

The European conformance test reports identifying the EN versions used by Qualcomm Atheros during original modular certification testing and which can be found on the Qualcomm Atheros customer support site in the QCA6234 folder.

12.5 Taiwan user manual wording

台灣: 國家通訊傳播委員會

低功率電波輻射性電機管理辦法

第十二條經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在5.25-5.35 GHz 頻帶內操作之無線資訊傳輸設備，限於室內使用。(For 5GHz only)

12.6 Korea user manual wording

Korea KCC

해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

13 OEM Integrator Required Action Items

A summary of key action items for the OEM Integrator is presented here. However, the responsible party must read, understand, and adhere to all requirements in this document.

- The OEM integrator will notify Qualcomm Atheros as early as possible in the design cycle where deviation from the BOM, Schematic, or Layout released by Qualcomm Atheros for the host PCB RF design is desired per the process: **Request for Review of Deviation from Qualcomm Atheros Design Specification.**
- The OEM integrator will obtain **Radiated Spurious Emissions testing per Part 15.247(d) and 15.407(b)** for each unique host system design and submit test reports to Qualcomm Atheros before host product(s) are launched.
- The OEM integrator will submit to the **Host Review for RF Safety and Colocation** process, for each unique host design, as early as possible in the design cycle.
- The OEM integrator will submit antenna specification sheets for each host design per the process: **Notification for Japan/Taiwan/Korea of Antenna Models to be used with the Module**
- The OEM integrator will ensure the Module/SiP is programmed in the factory with compliant transmit power not exceeding the levels specified in this document.
- The OEM integrator will carefully review global compliance requirements applicable to the host device for all target markets. OEM Integrator understands additional regulatory testing and authorizations may apply to the host device, beyond the modular approvals offered by Qualcomm Atheros per these instructions.

By signing below, the OEM Integrator, responsible party acknowledges receipt of this document. Please sign, scan, and email to: moduleinstructions@qualcomm.com

Company Name	_____	Signature	_____
Company Address	_____	Name	_____
	_____	Title	_____
		Email	_____
		Phone	_____
		Date	_____